

J. D. ROBINSON
EDWARD W. HARRIS

PHONE
WH 5-0211



**NUGENT
ELECTRONICS**

COMPANY, INCORPORATED
BOX 486 NEW ALBANY, INDIANA 47150
(AREA CODE 812) 945-0211

September 4, 1964

Mr. T. Nelson
Interlocking System Co.
Box 1546
Poughkeepsie, New York

Dear Sir:

We sincerely hope the enclosed literature may spark an idea for you in solving the various connect/disconnect problems you encounter. We have taken the liberty of listing a few of the reasons why our products may be able to help you:

1. Nugent produces the only socket reliable enough to be used extensively in aircraft, missiles and airborne equipment normally requiring components to be soldered in place.
2. Maintenance and service savings using Nugent sockets in many cases will more than justify their additional cost over the operating life of equipment and can be used as an additional advantage in sale of that equipment.
3. Nugent sockets take the solder heat - not your delicate, expensive components.
4. Nugent sockets provide a neat-appearing, uniform assembly and a mechanical and electrical circuit of the highest integrity.

We are proud to have people, facilities and experience in problem-solving proprietary items of proven universal value and demand, and specialized modifications of our stock items. We can give you fast response in new devices, designs and concepts to meet your constantly arising new needs in reliable, rugged, micro-miniature electrical and mechanical connectors.

Very truly yours,

Sam M. Shine

Sam M. Shine, Vice Pres., Sales

SMS:bn
Encl:

20 MINUTES FROM STANDIFORD AIRPORT, LOUISVILLE, KENTUCKY

MINIATURE
COAXIAL
CONNECTORS

MINIATURE
COAXIAL
SPLICES

MINIATURE
PIN SOCKETS
PLUG-IN
MOUNTS
FOR
TRANSISTORS
RELAYS AND
MINIATURE
COMPTS.



PRODUCT DATA REQUEST

FILL IN AS REQUIRED YOUR MATERIAL WILL BE FORWARDED BY RETURN AIRMAIL

COMPANY _____ NAME _____
ADDRESS _____ TITLE _____

PHONE _____ EX _____

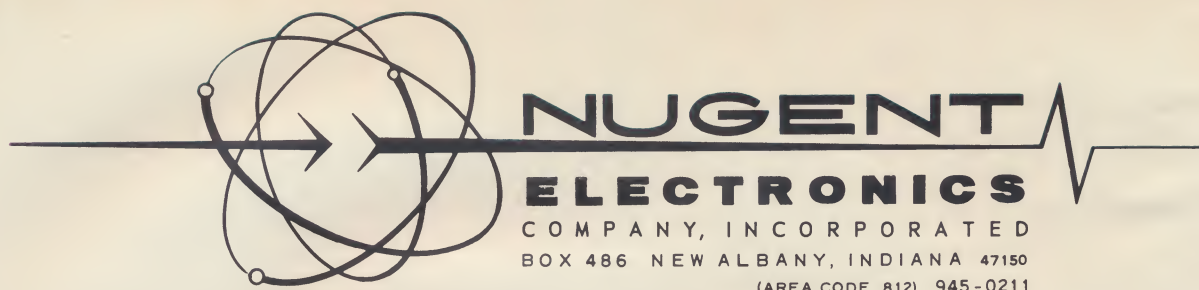
REP. CALL: YES ☐ NO ☐

STANDARD ITEM: SAMPLES _____ PRINTS _____ TEST REPORTS _____ QUOTE _____
_____ QUANTITY

PART NO. OR DESCRIPTION: _____

CUSTOM DESIGN: (SKETCH PROPOSED SOCKET OR ASSY SHOWING CRITICAL REQUIREMENTS,
SPACINGS AND MOUNTINGS)

SPECIFY: LEAD DIA. & TOL. _____ LENGTH & TOL. _____ MATERIAL _____ TO BE USED
WITH PROPOSED UNIT ABOVE. FINISH REQUIRED _____
MAX. ALLOWABLE ABOVE AND BELOW BOARD _____
PRINTS _____ QUOTE (QUANTITY) _____
REMARKS _____



REPRESENTATIVES

DAGE CORPORATION
757 Main Street
Stamford, Connecticut
Area Code 203 324-3123
All Export except Canada

K & M SALES CO.
Suite 500, Davidson Bldg.
17th & Main Streets
Kansas City 8, Missouri
Area Code 816 471-1355
Missouri, Iowa, Kansas and Nebraska

STAN PIERCE, INC.
24 Linden Street
Norwood, Massachusetts
Area Code 617 762-3164
Connecticut, New Hampshire, Maine,
Vermont, Massachusetts, and Rhode
Island

ELECTRO-COMP SALES, INC.
5129 West Devon Avenue
Chicago 46, Illinois
Area Code 312 763-3636
Illinois

LOGAN SALES COMPANY
463 Brewster Avenue
Redwood City, California
Area Code 415 369-6726
Northern California and Hawaii

SPACE ELECTRONICS CORP.
6513 E. Lancaster
P.O. Box 8008
Ft. Worth, Texas 76112
Area Code 817 451-6710
Texas, Arkansas, Oklahoma and
Louisiana

PAUL GRIFFIN
5601 Florida Avenue
Tampa, Florida
Area Code 813 236-6652
Florida

E.G. LOMAS LIMITED
227 Laurier Ave., W.
Ottawa, Ontario, Canada
Area Code 613 232-7106
Canada

"JOE" J.P. SCANLON
51 Bloomfield Place
Rochester 20, New York
Area Code 716 473-7553
Upper New York State

HUDNALL-DURNELL ASSOCIATES
P.O. Box 304
Terrace Park, Ohio
Area Code 513 831-4613
Southern Ohio

C.R. MAYER COMPANY
P.O. Box 152
Huntington, L.I., New York
Area Code 516 421-4322
New York Metropolitan Area, Northern
New Jersey

WARNER, KESLER, & ASSOCIATES
P.O. Box 338
South Whitley, Indiana
Area Code 219 723-5353
Indiana, Lower Michigan and Kentucky

SAMUEL A. JEFFRIES, INC.
105 Forrest Avenue
Narberth, Pennsylvania
Area Code 215 664-8500
Southern New Jersey, Pennsylvania,
Maryland, West Virginia, Delaware and
District of Columbia

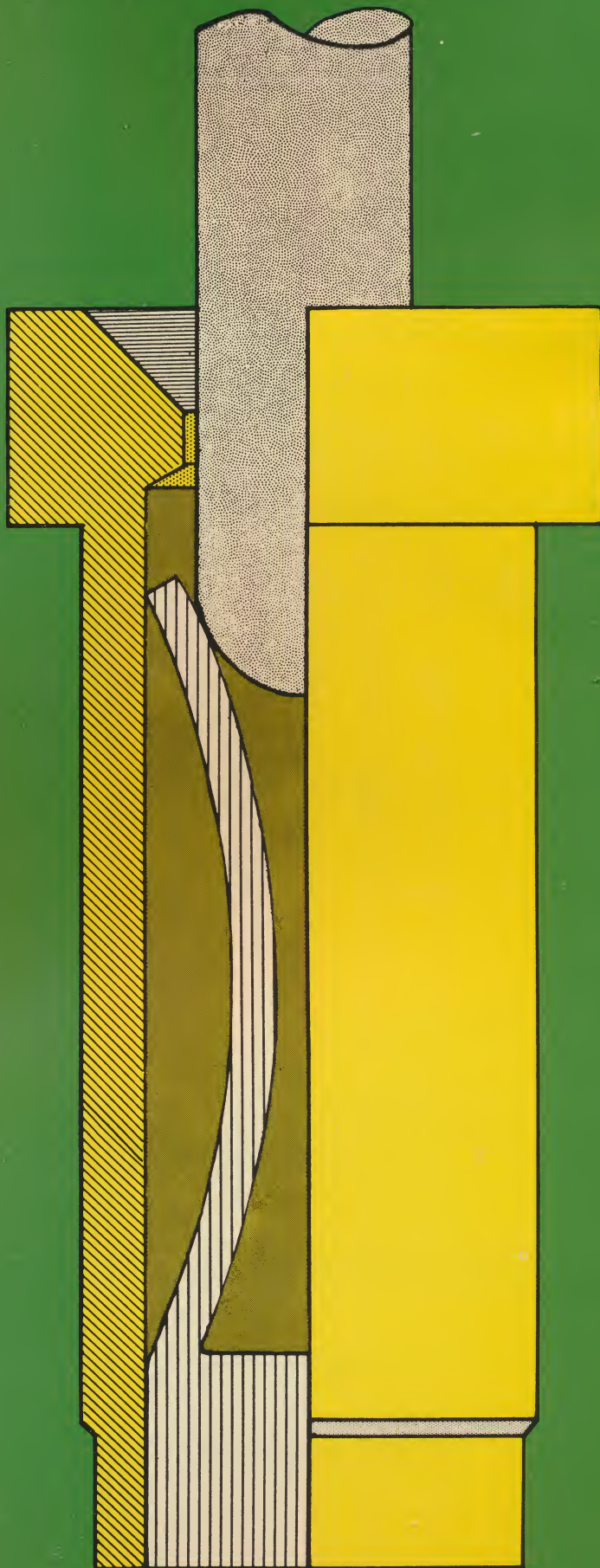
ROBERT W. MARSHALL COMPANY
6106 Excelsior Blvd.
Minneapolis 16, Minnesota
West 9-0457
Minnesota and Northwest Wisconsin

ASH M. WOOD CO.
P.O. Box 1158
Arcadia, California
Area Code 213 283-1201
Southern California, Arizona and
Nevada



NUGENT
ELECTRONICS
CORPORATION

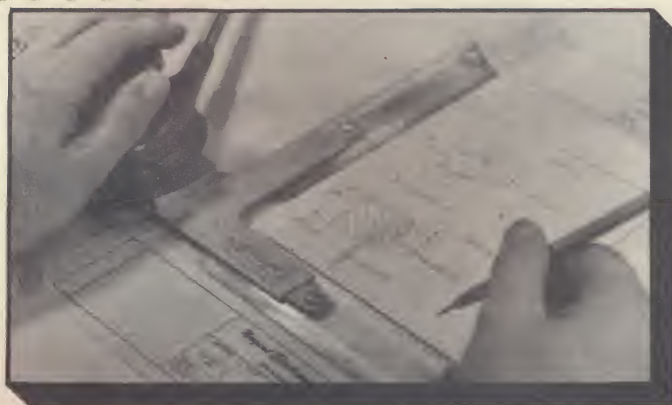
area code **812** **WH5-0211**



NUGENT
ELECTRONICS
COMPANY, INCORPORATED

"draw a line around a"

Present a problem and the Nugent Design and Engineering Department will devise a quick connect/disconnect solution. This department is particularly adept where ultra high reliability is needed for equipment subject to shock and vibration. When the maintenance or down time is a high cost factor, turn to Nugent for cost cutting, time saving solutions in the miniature electro-mechanical connection field.



"a three dimensional"

Working in conjunction with the Creative Design Department, the efficient Nugent Model Shop creates prototypes of custom designs and short-run production of new products. The Nugent Engineering Forward Unit stands ready to aid in every way, even to consultation at a customer's plant. Most Nugent quality products may be modified or redesigned for specific problems. This full line has evolved from just such proved universal application and subsequent demand.



". in action "

The use of Nugent Products frees the Designer-Engineer from previously rigid concepts by providing new ideas and smaller more reliable connection methods. Long production runs need not be reached to make a Nugent

Product feasible. Nugent's broad spectrum of "shelf" items generally meet small quantity or prototype demands, and for nominal tooling and delivery time, Nugent will meet your production schedule with any special device.

PIN SOCKETS

CONNECTORS

TRANSISTOR SOCKETS

MICRO-MODULE SOCKETS

PINS

SPRING-LOADED CONTACTS

SPLICES

RELAY PANELS

YOUR NEXT PROBLEM

PIN SOCKETS

A broad range and complete line of quick connect/disconnect miniature and micro-miniature receptacles with the utmost in high reliability. Some of the many names for these are: jacks, jack tips, terminals, sockets, retainers, receptacles, connectors, and many others. The brass outer shell is a precision screw-machine product manufactured by Nugent to extremely close tolerances in many shapes and sizes. The heat-treated beryllium-copper contact is of an exclusive and unique design to provide long, dependable life in the most critical and rugged applications. These ultra-high reliability contacts are made in a variety of sizes and configurations to allow for absolute contact.

The unique design of a Nugent Contact allows a pin or lead to enter with a gradual spreading action in which the fingers of the contact are slowly pushed aside until the breaching device has made full penetration into the socket...providing the greatest possible retention in proportion to entry forces. This low stress action accounts in part, for the extended life over many entry-withdrawal cycles. So positive is this action that in many multiple socket applications with extreme space limitations, these contacts are used without the outer brass shell.

The Nugent Contact offers versatility to infinity. Where ultra-high reliability "plug-in" devices are mandatory the Nugent Contact can be combined into the appropriate pattern for transistor sockets, module sockets, etc. The most common males are Nugent Pins, individual wires, fuses, transistor leads, relays, crystals and miniature models. At Nugent, solutions are created for problems not yet realized.

Nugent Pin Sockets are of two basic designs: Open Entry, where contacts extend to top of aperture; Closed Entry where contacts are protected during lead insertion by a collar at top of aperture. These two basic designs are modified with either closed end, where pin length is predetermined and allows for dip-soldering, or open end which allows pin to penetrate any length. There are five basic means of mounting Nugent Pin Sockets: riveting, flaring, expanding, (In Board) gluing and dip-soldering (only on closed end).

Open Entry-Closed End

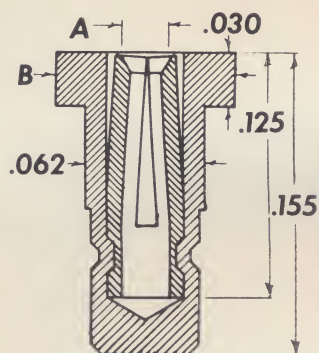


FIGURE 1

PART #	A	B
NS-430-20	.020	.093
NS-430-25	.025	.093
NS-460-20	.020	.074
NS-460-25	.025	.074

DESIGNED FOR DIP-SOLDER MOUNTING

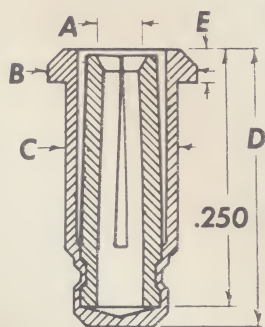


FIGURE 3

PART #*	A	B	C	D	E
NS-431-A 1	.050	.156	.117	.286	.032
NS-431-A 2	.050	.156	.117	.286	.032
NS-431-B 1	.040	.156	.117	.286	.032
NS-431-C 1	.030	.156	.117	.286	.032
NS-431-D 1	.060	.156	.117	.286	.032
NS-441-A 1	.050	.110	.100	.286	.032
NS-441-A 2	.050	.110	.100	.286	.032
NS-441-B 1	.040	.110	.100	.286	.032
NS-441-C 1	.030	.110	.100	.286	.032
NS-441-D 1	.060	.110	.100	.286	.032
NS-451-A 1	.050	.156	.117	.286	.112
NS-451-A 2	.050	.156	.117	.286	.112
NS-451-B 1	.040	.156	.117	.286	.112
NS-451-C 1	.030	.156	.117	.286	.112
NS-451-D 1	.060	.156	.117	.286	.112
NS-432-6 0	.060	.187	.156	.312	.032
NS-432-7 0	.070	.187	.156	.312	.032
NS-432-8 0	.080	.187	.156	.312	.032
NS-432-9 0	.090	.187	.156	.312	.032
NS-432-1 00	.100	.187	.156	.312	.032

DESIGNED FOR DIP SOLDER MOUNTING
ASSEMBLY DIMPLED

* NUMBER OF CONTACT FINGERS

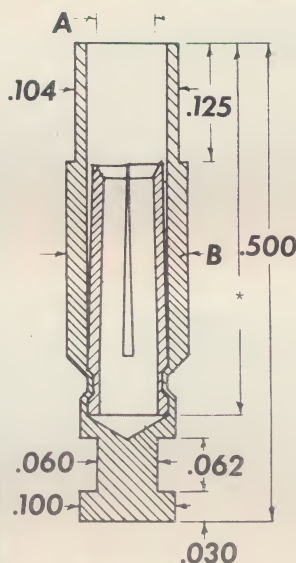


FIGURE 2

PART #	A	B
PS-30-103	.030	.156
PS-40-103	.040	.156
PS-50-103	.050	.156
PS-60-103	.060	.156
PS-30-104	.030	.125
PS-40-104	.040	.125
PS-50-104	.050	.125
PS-60-104	.060	.125

*387 MAX. PIN LENGTH
ASSEMBLY DIMPLED.
SOCKET MAY BE COUNTER-SUNK OR RIVETED

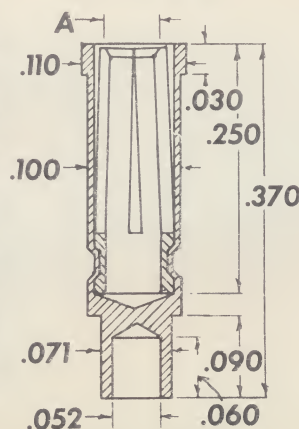


FIGURE 4

PART #	A
PS-30-101	.030
PS-40-101	.040
PS-50-101	.050
PS-60-101	.060

ASSEMBLY DIMPLED
SOCKET MAY BE MOUNTED
BY "DIP SOLDER", FLARED
OR RIVETED
USE OUR FLARING TOOL #
AFT-1 OR RIVET TOOL #
ATR-52

PIN SOCKETS

Closed Entry - Closed End

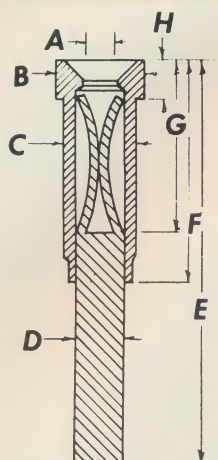


FIGURE 9

PART #	A	B	C	D	E	F	G*	H
PS-256-13	.020	.093	.062		.200	.200	.165	.030
PS-256-42	.020	.105	.085		.210	.210	.175	.040
PS-258-18	.020	.093	.062		.175	.175	.140	.040
PS-301-14	.030	.093	.072		.230	.230	.175	.040
PS-301-43	.030	.105	.085		.240	.240	.190	.040
PS-302-15	.030	.093	.072		.410	.410	.340	.040
PS-303-14	.030	.093	.072	.050	.410	.230	.175	.040
PS-402-33	.040	.093	.085		.235	.235	.175	.040
PS-402-44	.040	.105	.085		.235	.235	.175	.040
PS-403-30	.036	.093	.085		.426	.426	.350	.030
PS-404-40	.040	.110	.085		.315	.315	.260	.020

*MAXIMUM RECOMMENDED PIN LENGTH
ASSEMBLY, PRESS FIT
SOCKET MAY BE SOLDER OR EPOXY MOUNTED IN BOARD

Closed Entry - Open End

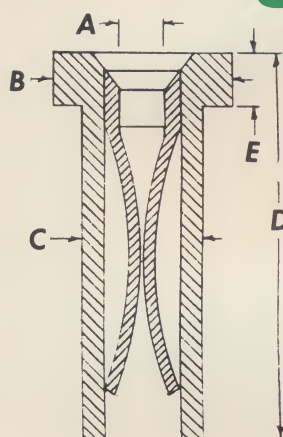


FIGURE 10

PART #	A	B	C	D	E
PS-2515-51	.020	.093	.062	.200	.030
PS-3013-62	.030	.093	.070	.200	.030
PS-406-63	.040	.110	.086	.200	.030

MAY BE MOUNTED IN PANEL BY MANUAL
SOLDERING OR WITH EPOXY.
BOTTOM OF CONTACT IS OPEN

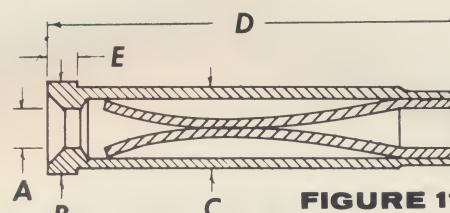


FIGURE 11

PART # PS-401-30
MAY BE MOUNTED IN PANEL BY
MANUAL SOLDERING OR WITH AN
EPOXY. BOTTOM OF CONTACT IS
OPEN.

Test Jack

PART #	A	B
PS-81-1-1	.052	.125
PS-81-1-2	.067	.125
PS-81-1-3	.100	.125
PS-81-2-1	.052	.250
PS-81-2-2	.067	.250
PS-81-2-3	.100	.250

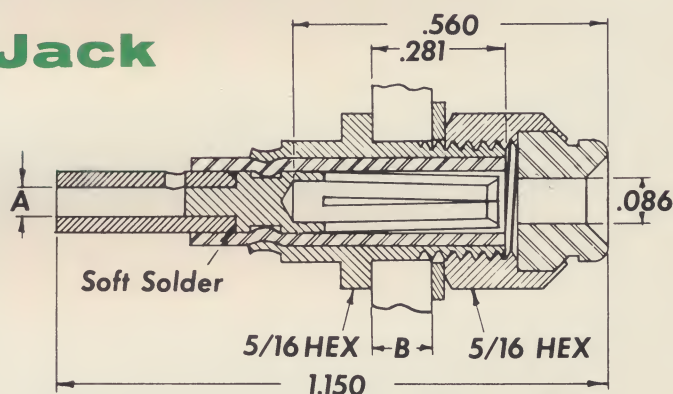


FIGURE 12

specifications

MATERIALS:

Contacts—Beryllium Copper per QQ-C-530 in condition HT.

Shells—Half-hard Brass per QQ-B-626.

FINISHES:

Contacts—Silver plate .0002 inch minimum per QQ-S-365a., or, Gold flash .000,030 inch minimum (Similar to MIL-G-45204) over silver plate.

Shells—Solder plate, 60% Tin 40% lead per MIL-F-14072M-259, or, Gold over silver as above.

Special—Rhodium, Nickel, Platinum and other finishes are available on special order.

CHARACTERISTICS:

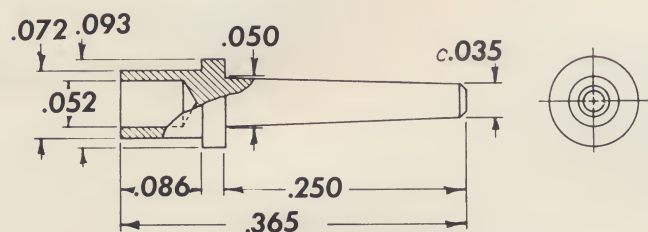
In one test, Nugent pin sockets showed .025 ohms resistance or less after humidity test MIL-E-5272. Pin sockets have also been subjected to MIL-STD-202A: Temperature Cycle, Method 102A, Test Cond. C.; Moisture Resistance; Method 106; Shock Test, Method 202; and MIL-S-19500 (40.20) Vibration. Representative pin sockets have been aged 1000 hours at 150°C (302°F), without impairing pin retention.

PINS

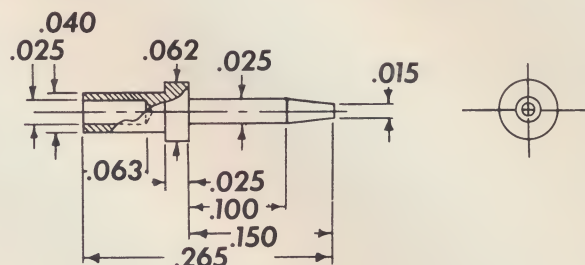
A broad range and complete line of quick connect/disconnect miniature and micro-miniature pins and terminals with the utmost in high reliability. The pin is a precision screw machine product manufactured by Nugent to extremely close tolerances in many shapes and sizes with straight or tapered diameters. Generally made of half-hard brass; however, available in a variety of other materials to specific situations. The Nugent pin is

designed to mate with the Nugent Pin Socket for dependable performance in ultra-high reliability, shock/vibration applications.

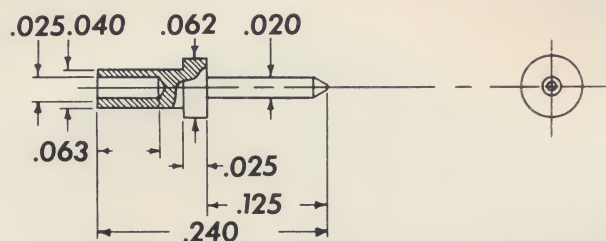
The Nugent Pin/Terminal is generally used as a termination device. Rear Terminations for solderpots, turrets, milled sections or straight diameters. They may be mounted as rivet, with solder or by molding.



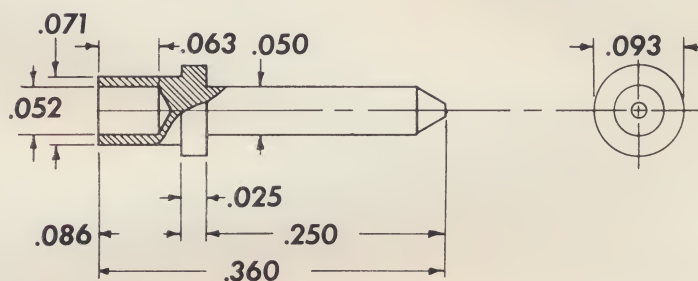
CP-1 Mates with Fig. 2,3,4,5 and 6 (.050 dia pin) Series Sockets



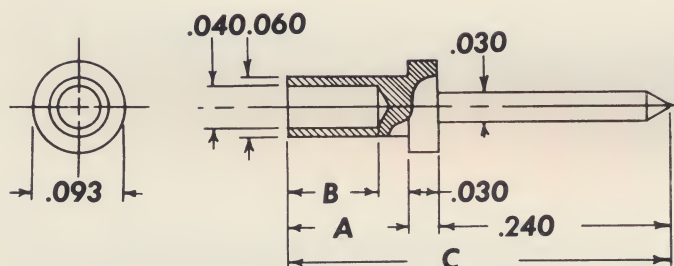
CP-2 Mates with PS-301-,303-,304-,305- Series Sockets and Fig. 1 (.025 dia pin) Series



CP-3 Mates with PS-251-,252-,253-,254-,255-,256- and Fig. 1 (.020 dia pin) Series

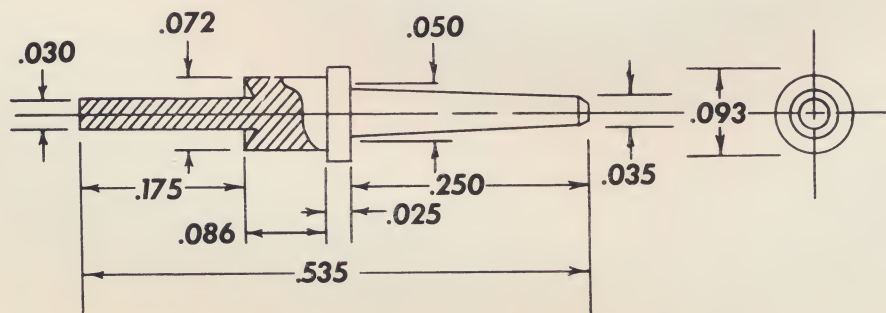


CP-4 Mates with Fig. 2,3,4,5 and 6 (.050 dia pin) Series Sockets



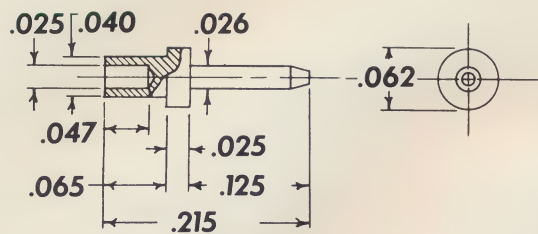
DASH #	A	B	C
-32	.032	.032	.302
-47	.047	.047	.317
-62	.062	.062	.332
-93	.093	.093	.363
-125	.125	.093	.395

CP-6 Mates with PS-302 and Fig. 2,3,4,5 and 6 (.030 dia pin) Variable "A & B" dim. on request

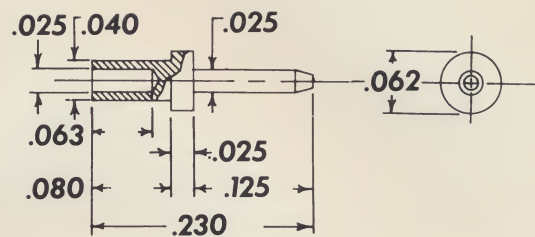


CP-8 Modified CP-1

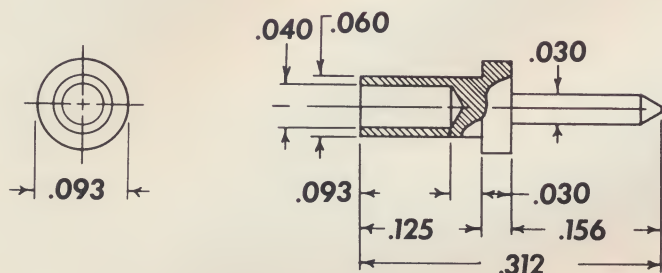
PINS



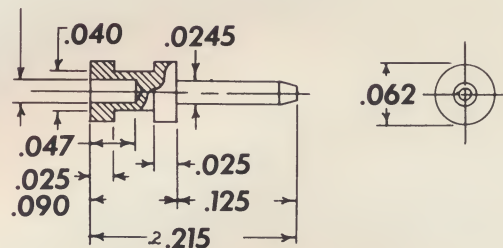
CP-10 Mates with PS-301-, 303-, 304- and 305-Series Sockets and Fig. 1 (.025 dia pin) Series



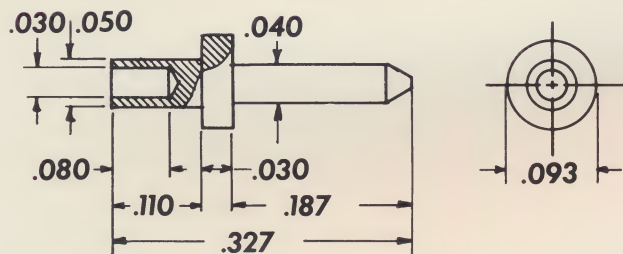
CP-11 Mates with PS-251-, 252-, 253-, 254-, 255-, 256-Series Sockets and Fig. 1 (.325 dia pin) Series



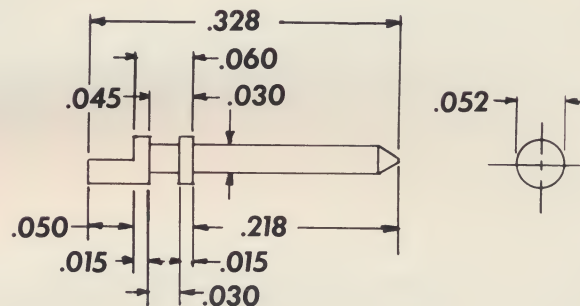
CP-12 Mates with PS-301-, 303-, 304- and 305-Series Sockets and Fig. 1 2,3,4,5 and 6 (.030 dia pin) Series



CP-14 Mates with PS-251-, 252-, 253-, 254-, 255-, 256- and Fig. 1 (.025 dia pin) Series



CP-24 Mates with Fig. 2,3,4,5,6 and 7 (.040 dia pin) Series



CP-60 Mates with PS-302 and Fig. 2,3,4,5 and 6 (.030 dia pin) Variable "A & B" dim. on request

specifications

MATERIAL:

Brass, Half hard, per QQ-B-626

FINISH:

Silver plate 0.0002 inch minimum per QQ-S-365a, or, Gold flash 0.000,030 inch minimum (similar to MIL-G-45204) over silver plate above.

Power rating naturally depends on the size of the pin and the other components being used with it.

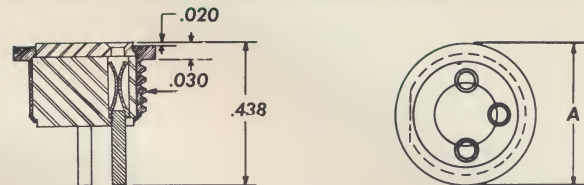
Other materials and finishes are available on special order.

Many other configurations available on request.

RELAY, CRYSTAL, MODULE SOCKETS

This is an area of infinite imagination...Many basic packages for plugging in standard components are already shelf items. Combine the basic rugged beryllium copper contact mounted in glass epoxy or molded plastic for whatever the application requires. Nugent can fabricate and design for special pin socket applications and resolve vexing problems in testing and servicing.

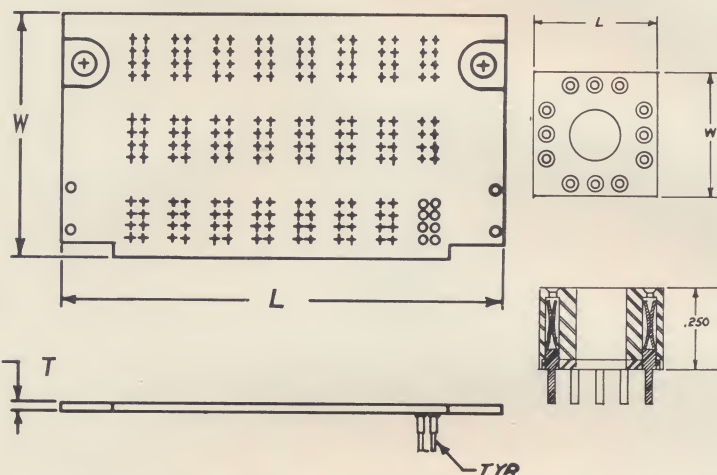
The basic Pin Socket can be incorporated in many types of material. Thin wafer, to full molded forms...Glass epoxy and many molded plastics. Spacing capabilities range from .050 C-T-C Grid and lead diameters from .015. In addition to the normal socket functions of serviceability, maintenance and protection of prime components from solder heat; various types of contact terminations, right-angle terminations and sundry other modifications can be designed to solve endless problems. Used extensively in equipment subjected to shock/vibration.



PART #	CASE	# PINS	PIN PATTERN	DIA.	A	HOLE SIZE
5173C	TO-5	3 CIR.		.017	.375	.346
5253C*	TO-5	3 CIR.		.025	.437	.376
5174C	TO-5	4 CIR.		.017	.375	.346
5176C	TO-5	6 CIR.		.017	.375	.346
5178C	TO-5	8 CIR.		.017	.375	.346
51710C	TO-5	10 CIR.		.017	.375	.346
51712C	TO-5	12 CIR.		.017	.375	.346
5174L	TO-7	4 IN LINE		.017	.375	.346
8303C*	TO-8	3 CIR.		.030	.500	.439
18173C	TO-18	3 CIR.		.017	.281	.251
18174C	TO-18	4 CIR.		.017	.281	.251
5173L	TO-22	3 IN LINE		.017	.375	.346

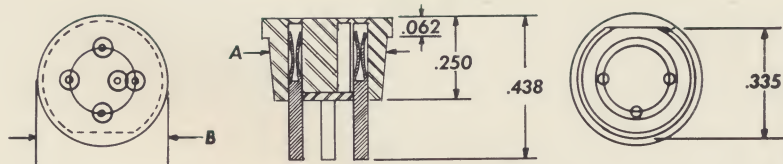
ALL CONTACTS TERMINATE WITH SOFT COPPER LEADS

* ITEMS 5253C AND 8303C HAVE A .030 DIA. LEADS OF ALL OTHER ITEMS ARE .020 DIA.
SOCKETS FOR CHASSIS MOUNTING WITH THREADED, ALUMINUM SHELL
CORE MATERIAL OF ASSEMBLY INDICATED BY PREFIX TO PART # "G-", EPOXY: "T-", TEFLON: "P-", PHENOLIC.

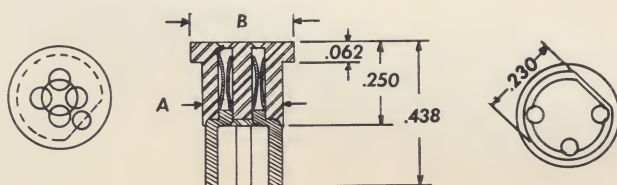


TYPICAL "CUSTOM" SOCKET

MOLDED TRANSISTOR SOCKETS



PART #	CASE	# PINS	PIN PATTERN	A	B
5-3	TO-5	3		.360	.395
5-4	TO-5	4		.360	.395
5-43	TO-5 OR TO-22	3		.360	.395
5-42	TO-5 OR TO-22	3		.360	.395



PART #	CASE	#PINS	PIN PATTERN	TERMINAL PATTERN	A	B
18-32	TO-18	3			.251	.312
18-33	TO-18	3			.251	.312
18-42	TO-18	4			.251	.312
18-43	TO-18	4			.251	.312

MOLDED "MICA-PHENOLIC" TRANSISTOR SOCKETS FOR EITHER "DIP-SOLDER" OR "PANEL" MOUNTING

RINGS TO MOUNT MICA FILLED PHENOLIC SOCKETS IN PANELS .030" TO .093" THICK

5-3 THRU # 5-42 REQUIRES RING #W-52 #18-32 THRU #18-43 REQUIRES RING #W-18-2

PIN SOCKETS

Open Entry - Closed End

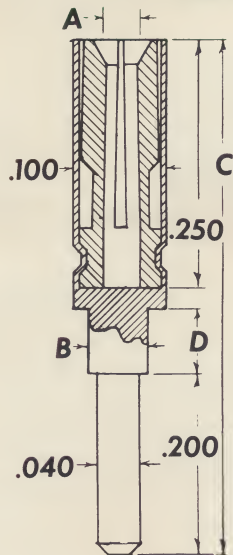


FIGURE 5

PART #	A	B	C	D
PS-30-100	.030		.486	
PS-40-100	.040		.486	
PS-50-100	.050		.486	
PS-60-100	.060		.486	
PS-30-102	.030	.060	.554	.068
PS-40-102	.040	.060	.554	.068
PS-50-102	.050	.060	.554	.068
PS-60-102	.060	.060	.554	.068

SOCKET MAY BE MOUNTED BY DIP SOLDER OR MOLDING
THE PS-40 ITEMS MAY BE STACKED.
ASSEMBLY DIMPLED

Open Entry - Open End

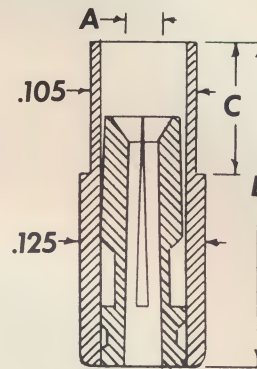


FIGURE 6

PART #	A	B	C
PS-30-107	.030	.262	.062
PS-40-107	.040	.262	.062
PS-50-107	.050	.262	.062
PS-60-107	.060	.262	.062
PS-30-109	.030	.325	.125
PS-40-109	.040	.325	.125
PS-50-109	.050	.325	.125
PS-60-109	.060	.325	.125

ASSEMBLY, PRESS FIT
SOCKET MAY BE COUNTER-SUNK IN BOARD OR FLARED.
OUR TOOL TO FLARE, #2-125

Closed Entry - Closed End

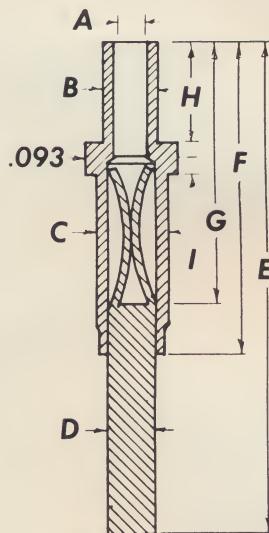


FIGURE 7

PART #	A	B	C	D	E	F	G*	H	I	FLARE TOOL	RIVET TOOL
PS-256-11	.020	.040	.062		.220	.220	.190	.030	.030	1-262	221-262
PS-256-37	.020	.045	.062		.282	.282	.230	.062	.030	1-262	225-262
PS-256-38	.020	.045	.062		.312	.312	.265	.093	.030	1-262	225-262
PS-301-7	.030	.055	.072		.312	.312	.265	.093	.030	1-374	335-374
PS-301-27	.030	.055	.072		.376	.376	.330	.156	.030	1-374	335-374
PS-301-36	.030	.055	.072		.345	.345	.300	.125	.030	1-374	335-374
PS-302-12	.030	.055	.072		.493	.493	.430	.093	.030	1-374	335-374
PS-303-7	.030	.055	.072	.050	.505	.312	.260	.093	.030	1-374	335-374
PS-304-46	.030	.055	.072		.282	.282	.250	.093	.030	1-374	335-374
PS-402-31	.040	.066	.085		.390	.390	.345	.156	.040	1-486	446-486
PS-402-34	.040	.066	.085		.328	.328	.270	.093	.040	1-486	446-486
PS-402-35	.040	.066	.085		.360	.360	.305	.125	.040	1-486	446-486

*MAXIMUM PIN LENGTH RECOMMENDED WITHOUT ADJUSTMENT TO COMPENSATE FOR THE SHORTENING OF DIMENSION WHEN ASSEMBLED IN BOARD
ASSEMBLY, PRESS FIT SOCKET MAY BE FLARED OR RIVETED IN BOARD

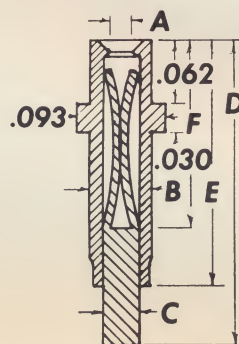
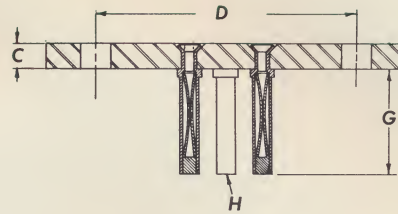
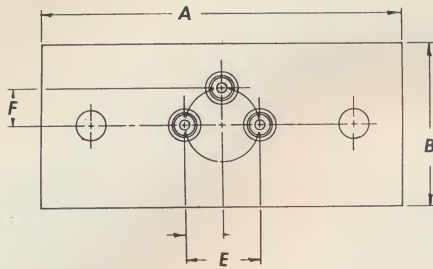


FIGURE 8

PART #	A	B	C	D	E	F*	TOOL #
PS-252-23	.020	.062	.040	.440	.255	.190	1-262
PS-263-23	.020	.062	.040	.315	.255	.190	1-262
PS-254-23	.020	.062		.255	.255	.190	1-262
PS-256-9	.020	.062		.200	.200	.165	1-262
PS-2562-9	.020	.060	.040	.260	.200	.165	1-262
PS-304-29	.030	.072		.200	.200	.165	1-374

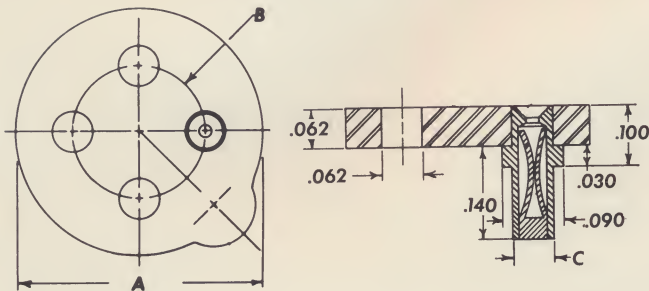
*MAXIMUM PIN LENGTH RECOMMENDED
ASSEMBLY, PRESS FIT
SOCKET DESIGNED TO EXPAND OR STAKE IN BOARD

FABRICATED TRANSISTOR SOCKETS



PART #	CASE	# PINS	PIN DIA.	A	B	C	D	E	F	G	H
NS-503-11	TO-5	3	.017	1.312	.500	.062	.960	.200	.156	.220	.062
NS-503-20	TO-5	3	.017	1.062	.500	.062	.750	.200	.140	.220	.062
NS-503-3	TO-8	3	.030	1.375	.625	.093	1.00	.282	.113	.493	.072
NS-503-6	TO-8	3	.030	1.312	.500	.093	.960	.282	.156	.493	.072

NOTE: ALL OF THE ABOVE ITEMS ARE AVAILABLE WITH 4 PINS, AS "NS-504-"
FABRICATED "G-10" EPOXY "TRANSISTOR SOCKETS" WITH MOUNTING HOLES



PART #	CASE	# PINS	DIA.	A	B	C
NS-503-2	TO-5	3	.017	.370	.200	.062
NS-503-8	TO-5	3	.025	.370	.200	.072
NS-503-10	TO-8*	3	.025	.430	.282	.072

* HAS NO ORIENTATION TAB.

FABRICATED "G-10" EPOXY TRANSISTOR SOCKETS
TO DIP SOLDER IN PRINTED BOARDS
ALL OF THE ABOVE ITEMS ARE AVAILABLE WITH 4
PINS, AS "NS-504-"

specifications

MATERIALS:

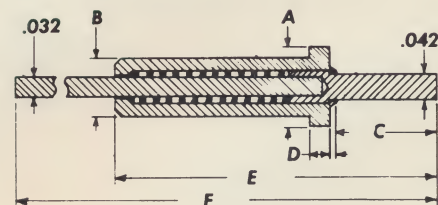
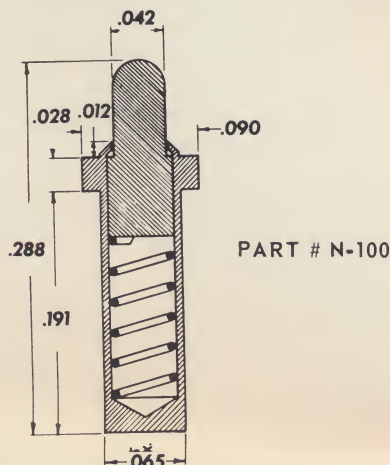
Molded Bodies—Mica-filled phenolic, natural color,
MIL-M-14F Type MFE.

Panels and Fabricated Bodies — Fiberglass-Epoxy
Laminate Grade G-10 per MIL-P-1877 Type GEE.

See Pin Socket Specifications for further detail.

SPRING - LOADED CONTACTS

The Nugent Spring Loaded Contact is used primarily in
data card operation, test apparatus, lab and prototype
use and selectors; however these basic increments can
be modified to fit a multitude of uses.



PART #	A	B	C	D	E	F
N-101	.093	.065	.060	.040	.288	.425
N-102-1	.125	.093	.093	.045	.430	.800
N-102-2	.125	.093	.093	.230	.430	.800
N-104	.125	.093	.156	.230	.555	.862
N-107	.125	.093	.156	.105	.555	.862
N-108	.125	.093	.156	.045	.500	.865
N-110	.085	.065	.060	.040	.288	.425

CONNECTORS

Nugent designs five basic connectors: Receptacle, Jack, Plug, Feed Thru's and Adapters. Each of these five basic connectors is available as a Straight or Right Angle Connector mounting on Bulkhead or on the cable. Three types of locks: ¼ turn-pull, friction and snap lock are available and cable may be joined to connector either with screw fitting or a snap fitting.

The Sub-Miniature Coaxial Connector is ideal as a test point, for interconnecting and removable equipment. Allows field servicing of the connector and quick connect/disconnect for service of equipment components.

Complete Catalogue available on request.

specifications

In various tests Nugent Connectors showed:

MIL-E-5272A:

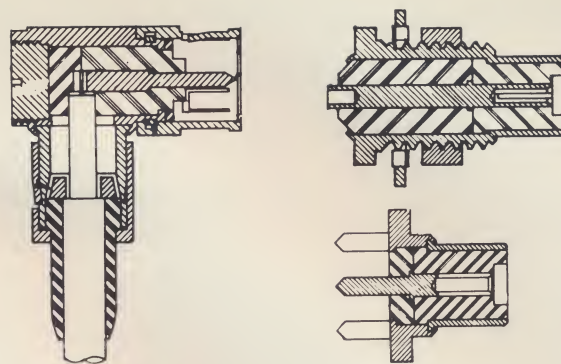
Shock and Vibration—paragraphs 4.7.1.2 and 4.15.2.2.6.

Tested during signal transmission. No effect.

Salt Spray and Corrosion—paragraph 4.6. No effect.

CHARACTERISTICS:

Corrosion Resistant, Silver plated brass components, contact gold flash over silver. Mechanical Structure, All parts precision machined, Teflon insulators, assembly positively held together by either a machined shoulder or a sturdy crimp (no press fits). Cable shield held by conventional type clamp and primary soldered in conventional type clamp and primary soldered in contact. Silicon rubber gaskets seal both ends of plugs.



OTHER TESTS:

Altitude 10 minutes, 300 VDC at 73,500 ft. Temperature shock +185 F to -65 F. High temperature 50 hours at 260 F. Intermittant temperatures to 350 F. Voltage 1500 VAC at 30 inches Mercury pressure, 1000 VDC at 3.4 inches Mercury pressure. Nugent Connectors exceed requirements of these tests. Data on file.

GENERAL SPECIFICATIONS:

CONNECTORS & COAXIAL CABLE SPLICES:

Silver Plate: Electro deposit 0.0002 inches minimum per Fed. Spec. QQ-S-356a

Gold Flash: 0.000,030 inches minimum, similar to MIL-G-45204.

Brass: Half hard composition 22, Fed. Spec. QQ-B-626.

Beryllium Copper: Condition HT, Fed. Spec. QQ-C-530.

Polytetrafluoroethylene (Teflon): Electrical grade MIL-C-17B, type F dielectric.

Silicone Rubber: (Connectors only) MIL-R-5847.

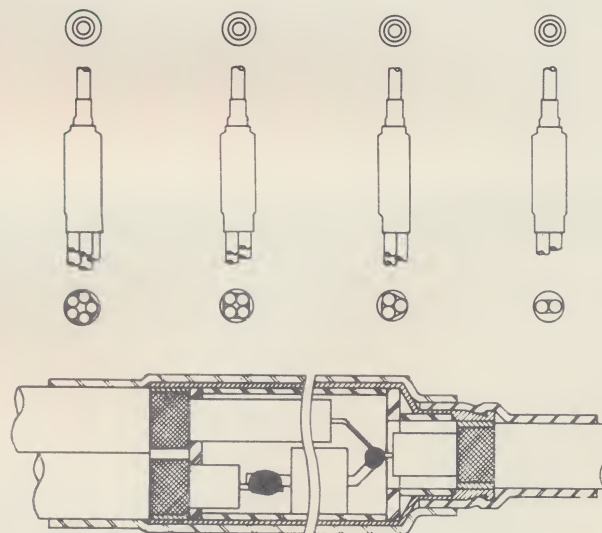
COAXIAL CABLE SPLICES

The Nugent Coaxial Cable Splice is a practical continuation of the cable shielding with a uniform mechanical splice of sufficiently uniform impedance to permit predetermined compensation. The Coaxial Cable Splice allows the incorporation of instruments in the circuit and components such as resistors, transistors, etc., within the space. Nugent manufactures over 50 splices thus providing an infinite variation of application and design to cut overall unit costs. Hook-up wire and multiple coax combinations are common. The splice may be injected with epoxy resin, or used as a quick connect/disconnect service area. Splices may be Teflon jacketed or taped. The stock splices provide variation for size and number of cable, jackets, metal parts, insulators and plating. Combinations of 1-1 thru 5-5 are available. These splices accommodate the miniature and sub-miniature cable of 250 inches max., over jacket. Complete Catalogue available on request.

Splices meet or exceed stringent tests in vibration, humidity, temperature, tensile strength, and insulation resistance. Data on file.

FACILITIES

Screw machines—specialized automatic equipment and machines for providing equality and volume of such items as Nugent's unique contact—necessary hand secondary and special operation equipment for providing that modification or custom service where needed—re-



sistance welding equipment—soldering equipment—test equipment to ensure performance of a unit to customers specifications or to established performance levels—the latest, most carefully controlled heat-treating and precious metal plating facilities—to insure uniform performance of the finished part.

QUALITY CONTROL

Judicious men with direct authority in Quality Control supervise experienced quality conscious craftsmen who meticulously hand check and inspect every pin socket and assembly. In the entire Nugent organization speed is second only to quality. To insure the reliability of all contacts in each assembly and to acquire the best possible performance, each contact is individually checked prior to final assembly; a final 100% pin check is made of each contact by hand. This attention to precise tolerance, and personal concern provides ultra-high reliability. Wherever failure can not be tolerated, a Nugent product belongs. Some customers report more than 10,000 insertion/withdrawal cycles, using pin sockets in test operations with no failures.



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